

AUTHORIZATION TO DISCHARGE UNDER THE ALASKA POLLUTANT DISCHARGE ELIMINATION SYSTEM FOR ALASKAN MEDIUM-SIZE SUCTION DREDGE PLACER MINERS

GENERAL PERMIT NUMBER AKG371000

Authorization Number: [#]

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION Wastewater Discharge Authorization Program 555 Cordova Street Anchorage, AK 99501

In compliance with the provisions of the Clean Water Act (CWA), 33 U.S.C. §1251 *et seq.*, as amended by the Water Quality Act of 1987, P.L. 100-4, this permit is issued under provisions of Alaska Statutes (AS) 46.03; the Alaska Administrative Code (AAC) as amended; and other applicable State laws and regulations.

Owners and operators of facilities engaged in the processing of placer gold by suction dredging, except those sites excluded from coverage in Part I of this Alaska Pollutant Discharge Elimination System (APDES) permit, are authorized to discharge to waters of the United States, only in accordance with effluent limitations, monitoring requirements, and other conditions set forth herein.

A COPY OF THIS GENERAL PERMIT MUST BE KEPT AT THE SITE WHERE DISCHARGES OCCUR.

[INSERT PERMITTEE NAME IN BOLD AND CAPS]

[INSERT RECEIVING WATER IN BOLD AND CAPS]

This permit is effective October 4, 2005.

This permit and the authorization to discharge shall expire at midnight on October 4, 2010.

The permittee applied for permit reissuance in a timely manner. Consequently, this permit authorization has been administratively extended beyond the general permit's expiration date, and the permittee is bound to comply with its terms and conditions until this general permit is reissued by DEC.

Signed	
Signature	Date
Printed Name	 Title

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1 PERMIT COVERAGE

1.1 Coverage and Eligibility

- 1.1.1 Existing Facilities (those suction dredge facilities having coverage under the 2005 Alaska Placer Mining General Permit (GP)): Owners or operator of facilities with coverage under the 2005 GP are eligible for coverage under this permit. See Permit Part 1.6 for notification requirements.
- 1.1.2 New Facilities/Recommencing Facilities: Upon submittal of a permit application or Notice of Intent (NOI) to discharge in accordance with 40 CFR § 122.21(a), all suction dredge facilities that meet the criteria for coverage under this permit will be granted coverage.
- 1.1.3 Expanding Facilities: Suction dredge facilities that plan to expand must submit a new Annual Placer Mining Application (APMA) that describes the new discharge. The current permit may be terminated and a new permit, reflecting the changes, issued in its place if the facility meets all the necessary requirements of coverage.
- 1.1.4 Authorization to discharge requires written notification from the Alaska Department of Environmental Conservation (Department or DEC) DEC that coverage has been granted and that a specific permit number has been assigned to the operation.

1.2 Covered Placer Mining Operations

- 1.2.1 This permit authorizes placer mining by suction dredges with intake nozzles less than or equal to 10 inches and greater than 6 inches; and
- 1.2.2 Hose size shall not be greater than 2 inches larger than the nozzle size. If a constrictor ring is used, nozzle size may be determined based on the size of the constrictor ring, provided that the ring is of solid, one-piece construction with no openings other than the intake and openings not greater than one inch between the constricting ring and nozzle, and that the ring is welded or otherwise permanently attached over the end of the intake nozzle.

1.3 Prohibitions

1.3.1 This GP does not apply to facilities that are proposed to be located in National Park System Units (i.e., Parks and Preserves), National Monuments, National Sanctuaries, National Wildlife Refuges, National Conservation Areas, National Wilderness Areas, within one nautical mile of a Steller sea lion rookery or haulout area, Tier 3 waters, or waters adjacent to areas designated as wild under the Wild & Scenic Rivers Act.

This GP does not apply to Critical Habitat designated under the Endangered Species Act (ESA) for the spectacled eider, Steller's eider, and northern sea otter. A map in Appendix B shows the general areas of the habitat. If your facility is proposed for any of the follow quadrangles please consult http://alaska.fws.gov/fisheries/endangered/consultation.htm or contact the USFWS Fairbanks office at (907) 456-0441 or the Anchorage Field Office at (907) 271-1467.

Eider and Sea Otter Critical Habitat Areas			
Adak	Hooper Bay	Norton Bay	St. Lawrence
Afognak	Iliamna	Nunivak Island	St. Michael
Amukta	Kaguyak	Point Hope	Stepovak Bay

Eider and Sea Otter Critical Habitat Areas			
Atka	Karluk	Point Lay	Sutwik Island
Attu	Kenai – (west side of	Port Moller	Trinity Islands
Baird Inlet	Cook Inlet south of Redoubt Point)	Rat Islands	Ugashik
Chignik	Kiska	Samalga Islands	Umnak
Cold Bay	Kodiak	Seguam	Unalakleet
Delong Mountain (D-4 & 5)	Kuskokwim Bay	Seldovia	Unalaska
False Pass	Marshall	Simeonof Island	Unimak
Gareloi Island	Mt. Katmai	Solomon	Wainwright

1.3.2 This permit does not apply to wetlands designated in the 1995 <u>Anchorage Wetlands Management</u> Plan.

1.4 Additional Requirements

- 1.4.1 Many streams and stream reaches in Alaska have been designated as part of the federal wild and scenic rivers system or as Conservation System Units (CSUs) by the federal government. Permittees should contact the district offices of the federal agencies that administer the designated area for additional restrictions that may apply to operating within the area.
- 1.4.2 Many streams in Alaska where placer mining occurs have been designated by the Alaska Department Fish and Game (ADF&G) as anadromous fish streams. Placer mining activities in these streams require an ADF&G Fish Habitat Permit that may include additional restrictions. The "Atlas to the Catalog of Waters Important for the Spawning, Rearing, or Migration of Anadromous Fish" (http://www.sf.adfg.state.ak.us/SARR/awc/) lists the streams in the State that require prior ADF&G authorization. In addition, placer mining activities in resident fish streams require an ADF&G Fish Habitat Permit if the proposed activity will block or impede the efficient passage of fish. Permittees operating in anadromous or resident fish streams should contact ADF&G to determine permitting requirements and additional restrictions that may apply.

1.4.3 POLAR BEAR CRITICAL HABITAT

1.4.3.1 Permittees wishing to operate in Polar Bear Critical Habitat shall note this on the NOI. The following table contains a list of quadrangle maps where this habitat can be found. More detailed maps can be found at

http://alaska.fws.gov/fisheries/mmm/polarbear/esa.htm#critical habitat

Polar Bear Critical Habitat Areas		
Baird Inlet	Hooper Bay	Sagavanirktok
Baird Mountains	Kotzebue	Selawik
Barrow	Kuskokwim Bay	Shishmaref
Barter Island	Kwiguk	Solomon
Beechey Point	Meade River	St. Lawrence

Polar Bear Critical Habitat Areas		
Bendeleben	Mt. Michelson	St. Michael
Black	Noatak	Teller
Candle	Nome	Teshekpuk
Delong Mountain	Norton Bay	Unalakleet
Demarcation Point	Nunavak Island	Wainwright
Flaxman Island	Point Hope	
Harrison Bay	Point Lay	

- 1.4.3.2 Barrier island critical habitat and areas within no disturbance zones are excluded from coverage under this GP. Due to the level of suction dredge activity around Nome, a map showing an overview of the barrier islands plus a more detailed map of Norton Sound is included in Appendix C. The website above contains maps of other islands.
- 1.4.3.3 Sea ice critical habitat is excluded from coverage under this GP when sea ice is present. A map showing the extent of sea ice habitat is included in Appendix C.
- 1.4.3.4 Activities within denning critical habitat within the North Slope Borough only are authorized under this GP only from April 30 through October 1 each year.
- 1.4.3.5 Intentional harassment of polar bears, other than as authorized under the 50 CFR 18.34, is prohibited. Acceptable harassment is used only to deter a polar bear from damaging private property or endangering personal safety and not to cause the serious injury or death of a polar bear. Passive deterrence mechanisms can be used to avoid interactions with bears. These include rigid fencing and other fixed barriers used to limit a bear's access, bear exclusion cages to provide a protective shelter for people in areas frequented by bears, and bear-proof garbage containers to prevent food conditioning. *Preventive deterrence* measures can be used to dissuade a polar bear from initiating an interaction with property or people. Such measures include the use of acoustic devices to create an auditory disturbance causing polar bears to move away from the area. The use of acoustic deterrence is limited to those devices that create no more than a reasonable level of noises, *e.g.*, vehicle engines, automobile sirens, or horns, or an air horn.
- 1.4.3.6 If a polar bear is observed during operations, an observation sheet must be completed and submitted to the USFWS at the time of the annual report, January 31st for the previous year. An observation sheet is included in Appendix E.

1.4.4. TIMING

Suction dredging is prohibited under this general permit from September 1 to April 30 within 4.0 nm of locations that are used by 125 or more Steller's eiders as wintering areas. The areas of concern are specified below. **Bolded** names are not listed in the above table.

Location	Quad Map
the coastal seaward waters from Tununuk to Toksook Bay on	Nunivak Island
Nelson Island	

Location	Quad Map
the south side of Nunivak Island from Cape Mohican to	Nunivak Island
Atahgo Point	Cape Mendenhall
coastal seaward waters from the south end of Carter Spit north	Kuskokwim Bay
to Jacksmith Bay	Goodnews Bay
Goodnews Bay	Goodnews Bay
Chagvan Bay	Hagemeister Island
Egegik Bay	Naknek
Ugashik Bay	Ugashik, Bristol Bay
Bechevin Bay	Cold Bay, False Pass
Cape Lapin	Unimak
Akutan Harbor	Unimak
waters of Unalaska Bay south of Amaknak Island	Unalaska
the coastline between Cape Star on Umnak Island	Samalga Island
and the western tip of Samalga Island	
the south coast of the Ikatan Peninsula between	False Pass
Otter Cove and Cape Pankof on Unimak Island	
Thin Point to the east end of Kinzarof Lagoon in Cold Bay	False Pass, Cold Bay
Sanak Islands	False Pass
Moss Cape near Volcano Bay on the Alaska Peninsula	Port Moeller
Bear Bay	Cold Bay
Volcano Bay	Port Moeller
Coal Bay to McGinty Point	Port Moeller
Bay Point to Unga Spit on Unga Island	Port Moeller
Zachary Bay on Unga Island	Port Moeller
East Head to Popof Island airstrip on Popof Island	Port Moeller
Chignik Lagoon	Chignik
Wide Bay east to the mouth of Pass Creek and Hartman Island	Ugashik
the following locations on Kodiak Island: Ugak Bay,	Kodiak
Pasagshak Bay, Cape Chiniak, Kalsin Bay, Middle Bay,	Kaguyak
Womans Bay, and St. Paul Harbor	Trinity Islands
Seldovia Bay in Kachemak Bay	Seldovia
Homer Spit to Bishop's Beach	Seldovia
Happy Valley to Clam Gulch in Cook Inlet	Seldovia, Kenai
Kirschner Lake outlet to Rocky Cove on the	Iliamna
western shore of Cook Inlet	

1.5 Requiring an Individual Permit

- 1.5.1 The Department may require any person authorized by this permit to apply for and obtain an individual APDES permit when:
 - 1.5.1.1 The single discharge or the cumulative number of discharges is/are a significant contributor of pollution;
 - 1.5.1.2 The discharger is not in compliance with the terms and conditions of the GP;
 - 1.5.1.3 A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source;
 - 1.5.1.4 Effluent limitations guidelines are subsequently promulgated for the point sources covered by the GP;

- 1.5.1.5 A Water Quality Management Plan containing requirements applicable to such point sources is approved;
- 1.5.1.6 A Total Maximum Daily Load (TMDL) and corresponding wasteload allocation has been completed for a waterbody or a segment of a waterbody;
- 1.5.1.7 Circumstances have changed since the time of the request to be covered so that the discharger is no longer appropriately controlled under the GP, or either a temporary or permanent reduction or elimination of the authorized discharge is necessary.
- 1.5.2 The Department may deny coverage under this permit in the following circumstances:
 - 1.5.2.1 a land management agency with jurisdiction over affected portions of the receiving water, bed, or uplands submits a request that GP coverage be denied to DEC within thirty (30) days of the department's receipt of a permit application, APMA or NOI; and,
 - 1.5.2.2 the land management agency's request includes proposed additional or revised permit terms that the requesting agency believes -- based upon evidence attached to or cited in the request -- are necessary to protect the natural values of the affected location; and,
 - 1.5.2.3 the land management agency's request concerns a person who either;
 - 1.5.2.3.1 seeks to discharge into U.S. waters located in National Recreation Areas,
 National Historic or Natural Landmarks, congressionally designated Land Use
 Designation (LUD) II which are to be managed in a roadless state, or in State
 Refuges, Sanctuaries, or Critical Habitat Areas; or
 - 1.5.2.3.2 is in significant noncompliance with the terms and conditions of the most recent applicable APDES permit; or
 - 1.5.2.3.3 intends to discharge into waters designated as impaired under the Clean Water Act; or
 - 1.5.2.3.4 when US Fish & Wildlife Service believes that consultation under Section 7 of the Endangered Species Act is necessary for facilities proposed in or near marine coastal waters in the following listed Alaska quadrangles to protect Steller's eiders, spectacled eiders, sea otters, or their habitat.

Bristol Bay	Naknek
Cape Mendenhall	Nushagak Bay
Dillingham	Pribilof Islands
Goodnews Bay	Seguam
Hagemeister Island	

Any person denied coverage under this part must apply for and obtain coverage under either (1) an individual permit, or (2) another applicable watershed-specific general permit. Upon receipt of any such application, DEC will determine whether the permit terms requested by the land management agency should be included in the applicable permit.

- 1.5.3 The Department will notify the operator in writing by certified mail that a permit application is required. If an operator fails to submit, an individual APDES permit application by the date required in the notification, coverage under this GP is automatically terminated at the end of the day specified for application submittal.
- 1.5.4 Any owner or operator authorized by this permit may request to be excluded from the coverage of this permit by applying for an individual permit. The owner or operator shall submit an individual permit application (APDES permit application Form 1 and either Form 2C or Form 2D) with reasons supporting the request to the department at the address in Permit Part 1.6.4.2.
- 1.5.5 When an individual APDES permit is issued to an owner or operator otherwise covered by this permit, the applicability of this permit to the facility is automatically terminated on the effective date of the individual permit.
- 1.5.6 When an individual APDES permit is denied to an owner or operator otherwise covered by this permit, the Permittee is automatically reinstated under this permit on the date of such denial, unless otherwise specified by the Department.
- 1.5.7 A source excluded from this GP solely because it already has an individual permit may request that the individual permit be revoked and that it be covered by this GP. Upon revocation of the individual permit, this GP shall apply to the source.

1.6 Application Requirements

- 1.6.1 For permit coverage, owners or operators of facilities eligible for this permit shall submit a permit application, either an APMA or an NOI. A properly and accurately completed APMA or NOI (see Appendix D) provides all the information necessary for permit issuance. Application must be made:
 - 1.6.1.1 By owners or operators of existing facilities that submitted a new NOI prior to the expiration date of the 2005 GP shall be automatically covered by this GP.
 - 1.6.1.2 At least 60 days prior to discharge from a new, recommencing or expanded facility.
- 1.6.2 An APMA or NOI will be accepted as an application requesting coverage under this permit if all the required information is included and the APMA is signed as required in Part 1.6.3, below.
- 1.6.3 The APMA or NOI shall be signed by the owner or other signatory authority in accordance with Appendix A, Part 1.12 (Signature Requirements), and a copy shall be retained on site in accordance with Appendix A, Part 1.11 (Monitoring and Records).

OR

- 1.6.4 When applying for a permit,
 - 1.6.4.1 send an APMA to Alaska Department of Natural Resources (DNR) at either of the following addresses:

State Division of Mining, Land & Water 3700 Airport Way Fairbanks, AK 99709-4699

State Division of Mining, Land & Water 550 W. 7th Ave. Suite 900B Anchorage, AK 99501-3577

- or if an APMA is not used as an application, requirements of Parts 1.4 and 2.3.2 must be satisfied and an NOI must be submitted to
 - 1.6.4.2.1 DEC at the following address:

Alaska Department of Environmental Conservation
Division of Water
610 University Avenue
Fairbanks, Alaska 99709-3643

- 1.6.4.2.2 And a copy of the NOI sent to the land owner or manager.
- 1.6.5 A copy of the GP will be sent to the Permittee when it is determined that the facility can be authorized under this GP. If it is determined that a facility cannot be authorized to discharge under this permit, the applicant will be informed of this in writing.

1.7 Permit Expiration

This permit will expire five years from the effective date. For facilities submitting a new APMA at least 90 days prior to expiration of this GP, the conditions of the expired permit continue in force until the effective date of a new permit.

2 LIMITATIONS AND MONITORING REQUIREMENTS

2.1 Effluent Limitations

Permittees are authorized a 500 foot mixing zone where a turbidity plume may exceed Alaska Water Quality Standards.

2.1.1 Fresh Water

- 2.1.1.1 A visual increase in turbidity (any cloudiness or muddiness) 500 feet downstream of the suction dredge during operations is considered a violation of this permit.
- 2.1.1.2 If noticeable turbidity does occur 500 feet downstream of the work site, operation of the suction dredge must decrease or cease so that a violation as defined above does not exist.

2.1.2 Marine Water

- 2.1.2.1 A visual increase in turbidity (any cloudiness or muddiness) outside a 500 foot radius of the suction dredge during operations is considered a violation of this permit
- 2.1.2.2 If noticeable turbidity does occur outside a 500 foot radius of the work site, operation of the suction dredge must decrease or cease so that a violation as defined above does not exist

2.2 Monitoring Requirements

The following requirements apply to all facilities covered by this permit.

2.2.1 Suction dredge operators shall visually monitor for turbidity, as defined in Permit Part 2.1., once per day of operation. Individuals who conduct visual monitoring shall observe the turbidity plume, where visible, immediately downstream or radially from the dredge until the turbidity plume is no longer visible and note the distance. There is no need to monitor farther if the turbidity plume blends with the background before 500 feet.

All turbidity monitoring results shall be recorded daily. The Permittee shall maintain records of all information resulting from any visual inspections.

- 2.2.2 The Permittee will report the period of suction dredging in the Annual Report. Visual violation occurrences will also be reported on the Annual Report along with the measures taken to comply with the provisions of Permit Part 2.1.
- 2.3 Best Management Practices (BMP) Plan

The following BMP Plan applies to all facilities covered by this permit.

- 2.3.1 Dredging is permitted only within the active stream channel. Dredging within the active stream channel that results in undercutting, littoral channeling or that otherwise results in erosion of a stream bank is prohibited.
- 2.3.2 Dredging and discharging are prohibited within 500 feet of locations where anadromous fish are spawning or where anadromous fish eggs or alevins are known to exist at the time dredging occurs. Each Permittee shall consult the regional office of the ADF&G for the region in which the Permittee proposes to operate a dredge in order to obtain the information necessary to comply with this BMP. Each Permittee shall report the information obtained from ADF&G, and the name and title of the official contacted, to DEC concurrently with submission of an NOI.
- 2.3.3 Motorized winches or other motorized equipment shall not be used to move boulders, logs, or other natural obstructions within the active stream channel.
- 2.3.4 If an ADF&G Fish Habitat Permit (Title 16 Permit) is necessary, no wheeled or tracked equipment may be used instream while dredging is in progress unless it is allowed by a Title 16 permit.
- 2.3.5 Suction dredges shall not operate within 800 feet of another dredging operation occurring simultaneously.
- 2.3.6 Dredging of concentrated silt and clay should be avoided. The permittee shall use reasonable care to avoid dredging silt and clay materials that would result in a significant increase in turbidity. Reasonable care includes moving the dredge to a new location or reducing the volume of effluent discharge by limiting operation speed of the suction dredge.
- 2.3.7 Care shall be taken by the operator during refueling of the dredge to prevent spillage into surface waters or to groundwater. Any spills shall be cleaned up using materials such as sorbent pads and booms. All spills shall be reported to DEC by calling 1-800-478-9300.

For facilities with the capacity to store 1,320 gallons in the aggregate above ground or 42,000 gallons below ground, EPA requires that a Spill Prevention Control and Countermeasure Plan (SPCC Plan) be prepared and updated as necessary in accordance with provisions of 40 CFR Part 112.

3 MONITORING REPORTS

Monitoring results shall be summarized for each month and compiled in the Annual Report. The Annual Report shall be submitted no later than January 31 for the previous calendar year to the following address:

Alaska Department of Environmental Conservation Division of Water, Attn: Compliance 555 Cordova Street

Anchorage, Alaska 99501

If there is no mining activity during the year or no wastewater discharge to a receiving stream, the Permittee shall notify DEC of these facts no later than January 31 for the previous calendar year.